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Massachusetts 2015 Air Monitoring Network Plan

Response to Comments

10/9/15

MassDEP operates a network of 24 ambient air quality monitoring stations at locations across the state as part of a comprehensive program to provide information about air quality to the public and to determine compliance with National Ambient Air Quality Standards (NAAQS). Each year, MassDEP is required to submit to the U.S. Environmental Protection Agency (EPA) an Air Monitoring Network Plan in accordance with Title 40 CFR Part 58.10. On July 7, 2015, MassDEP published a draft 2015 Network Plan for a 30-day public comment period. MassDEP received comments from the U.S. Environmental Protection Agency Region 1 (EPA) on the draft Network Plan. MassDEP has summarized and responded to these comments below.

1. Comment: Page 6, Sulfur Dioxide Network – Based on your current network, Massachusetts is not currently obligated to site any additional SO₂ monitors under the final SO₂ NAAQS rule but EPA recently initiated a process to refine the agency’s approach for implementing the SO₂ standard. On April 17, 2014, EPA proposed the “Data Requirements Rule for the 1-Hour Sulfur Dioxide Primary National Ambient Air Quality Standard (NAAQS)” detailing modeling and monitoring guidance for implementing the SO₂ monitoring in some circumstances. We have initiated a dialogue with you regarding whether there are any areas in Massachusetts where additional SO₂ monitoring may have some merit.

Response: MassDEP will continue to work with EPA regarding implementing the final Data Requirements Rule for the 1-Hour SO₂ NAAQS that was issued on August 10, 2015.

2. Comment: Page 7. Nitrogen Oxides Network - MassDEP discusses the near-roadway monitoring requirements that were established when EPA revised the NO₂ NAAQS in January 2010 and established a 1-hour NO₂ standard. Under this rule, there are requirements to operate two (2) near-road sites in the Boston-Cambridge-Newton, MA-NH metropolitan area, and one (1) site in each of the Providence-Warwick, RI-MA; Springfield, MA; and Worcester, MA metropolitan areas. The Providence, RI near-road site established by RI DEM has met the

obligation in Providence-Warwick, RI-MA area, and your Von Hillern Street monitor in Boston is meeting the obligation for the first of the required near-road monitors in the Boston-Cambridge-Newton, MA-NH metropolitan area. We are pleased that the Von Hillern Street near-road monitoring location has begun operation and is reporting data to AQS.

In March 2013, EPA made revisions to the NO₂ Monitoring Requirements rule in response to feedback from the States encouraging a staggered deployment of these near-road monitors; with the first phase being deployed in January, 2014; a second phase by January, 2015; and a third phase by January, 2017. Under this rule, a second near-road NO₂ site in the Boston area must be operating by January 1, 2015.

We understand that MassDEP has identified a potential location and EPA remains committed to working with you to establish a monitor to meet federal requirements as expeditiously as practicable.

Response: MassDEP has identified a potential suitable location for a second near-road monitoring station in the Boston CBSA and will continue to coordinate with EPA on the most efficient and expeditious way to fulfill the near-road monitoring requirement.

3. Comment: Page 9. PM₁₀ - We note and agree with the consolidation of the two Springfield air monitoring locations, as well as the closure of the Boston City Square location. These actions will save Massachusetts resources.

Response: MassDEP acknowledges EPA's agreement.

4. Comment: Page 11. PM_{2.5} Network – On January 15, 2013, EPA revised the PM_{2.5} standard. In that rule, EPA also established that all continuous PM_{2.5} FEM monitors operating for more than 24 months should be used for comparison to the NAAQS unless a State specifically requests that the data be excluded under 40 CFR 58.11(e) and EPA approves that request. All of MassDEP's BAMs have a Federal Equivalent Method (FEM) designation. FEM monitors provide the hourly PM_{2.5} data that appears on MassDEP's *MassAir* website. We are pleased that MassDEP will use data from its FEM monitors for comparison to the NAAQS, with the exception of the FEM monitor at Springfield - Liberty Street because this monitor continues to not have acceptable data comparability with the collocated FRM monitor. MassDEP is requesting that the FEM monitors at Boston - Von Hillern Street, Brockton - Buckley Playground, and Greenfield - Veterans Field be exempt since these monitors have less than 24 months of data, but our records show that Von Hillern (6/15/13), Brockton (6/30/13) have been running for 24 months and should be considered for comparison to the NAAQS at this time. Greenfield was established on 7/1/14 therefore can still be excluded until next year's network plan. MassDEP will continue to use the Springfield FEM data for Air Quality Index reporting to the public and will evaluate ways to improve data comparability to the FRM data.

In our October 10, 2014 Network Plan Approval, we agreed that the Springfield monitor could be excluded. We continue to encourage MassDEP to work to improve agreement between the FEM and FRM at this location, through perhaps quicker collection and analysis of the PM filters. In addition, we encourage Massachusetts to code each of the continuous FEM monitors as

primary NAAQS compliance monitors, as appropriate, along with identifying appropriate co-located monitors in AQS.

MassDEP states that they intend to install a second FEM monitor at Boston-Von Hillern Street as a collocated analyzer for Quality Control and Assurance purposes. We note this but want to emphasize that this need is based on the number of continuous FEM operating as the primary monitor at each location. Fully utilized, these continuous FEMs can save resources for MassDEP.

Response: MassDEP acknowledges that the Boston - Von Hillern and Brockton - Buckley Playground FEMs now have been running for 24 months and therefore MassDEP will use these FEMs for comparison to the NAAQS. MassDEP will code all FEM monitors used for comparison to the NAAQS as primary NAAQS compliance monitors. MassDEP also will continue to work to improve agreement between the FEM and FRM PM_{2.5} monitors at Springfield - Liberty Street.

5. Comment: On page 11, it is important to note that EPA has been conducting an assessment of the IMPROVE Protocol Sites in an effort to optimize the Chemical Speciation Network (CSN) and create a network that is sustainable going forward. As a result of this assessment, EPA is recommending defunding a number of monitoring sites. Should these recommendations become final, Massachusetts will be affected at the following sites that are recommended for defunding: Truro – National Sea Shore (25-001-0002) and Ware – Quabbin Summit (25-015-4002). EPA is currently soliciting feedback regarding our recommendations. These changes are recommended to take place in January 2016. Final changes to the CSN network in the Commonwealth of Massachusetts should be reflected in the 2016 Monitoring Plan.

Response: MassDEP is reviewing EPA’s recommendations regarding the IMPROVE Protocol monitoring sites and will work with EPA on any changes regarding these sites.

6. Comment: On page 12, regarding lead. Please be aware that the opportunity to shut down this lead (by PM₁₀) monitor at NCore sites was proposed in a recent EPA rulemaking. Should Massachusetts choose to discontinue this lead monitoring, our ability to concur will be contingent upon the timing and final language of the rule changes proposed in that regard.

Response: MassDEP will follow EPA’s proposed rulemaking and will consider discontinuing lead at the Boston – Harrison Avenue NCore site based on the final rule.

7. Comment: On page 13, you note that Massachusetts is considering no longer measuring NOy at your Harrison Avenue NCore site. Please note that this is presently a required parameter to measure and report.

Response: MassDEP acknowledges that NOy is a required parameter and plans to continue monitoring NOy at the NCore site.

8. Comment: EPA believes that the Annual Network Plan could benefit from a one page description of every site in MassDEP’s air monitoring network.

Response: MassDEP has added a one page description of each of its monitoring sites as Attachment 4 of the final Network Plan.

9. Comment: Page 13. We note and acknowledge the following as your “Summary of Network Changes.” As noted in our comments, we do have comments and/ or concerns with some of these proposed changes. EPA notes that it is important to move quickly to replace the Adams/Mt. Greylock ozone site that was closed at the end of 2014, and to move more quickly to establish the 2nd near-road NO₂ site in the Boston area as it is overdue.

Response: MassDEP appreciates EPA’s comments and continuing partnership in air quality monitoring. MassDEP is in the process of securing a suitable location for a monitoring station in Pittsfield that will include ozone monitoring to replace the Adams ozone monitor, and will continue to work toward establishing a second near-road NO₂ site in the Boston area.